

THE NEOTROPICAL SPECIES OF THE ANT GENUS
STRUMIGENYS FR. SMITH: GROUP OF
OGLOBLINI SANTSCHI

BY WILLIAM L. BROWN, JR.

MUSEUM OF COMPARATIVE ZOOLOGY, HARVARD UNIVERSITY

The present paper is a continuation of my series on the New World fauna of the dacetine ant genus *Strumigenys* Fr. Smith. Earlier parts, containing keys to the abbreviations for measurements, proportions and institutions of deposition of the types, may be found in Jour. New York Ent. Soc. 61: 53-59, 101-110 (1953). Other parts have been published in later issues of the same journal, or are in press.

The present section deals with two related species, *S. ogloblini* Santschi and *S. perparva* new species. Both of these species have rather short mandibles for *Strumigenys* species of the New World, both have single preapical teeth, and both tend to have developed a lamelliform border on each side of the head along the upper margins of the scrobes.

The relationships of these species may be with the groups of *louisianae* Roger and *silvestrii* Emery, but this remains to be tested by further examination of all the New World species of the genus. *S. perparva* is one of the real dwarfs of the genus, and it may have been confused with *S. silvestrii* Emery or *S. schmalzi* Emery in the past.

***Strumigenys perparva* new species**

(Fig. 1a)

HOLOTYPE WORKER: TL 1.6, HL 0.40, ML 0.20, WL 0.40 mm.; CI 81, MI 50. This minute ant is one of the very smallest *Strumigenys*, being smaller even than *S. schmalzi* Emery. An outstanding character is the short, very feebly bowed mandibles, each with a slender, prominent preapical tooth situated remote from the apex, near the apical third of the exposed length of the shaft. In general pattern, this mandible resembles that of the larger species *S. ogloblini*. There is no extra preapical tooth or denticle on the inner border of the mandible. Unlike *ogloblini*, *perparva* lacks an intercalary denticle in the apical fork (seen at 144×).

Head convex dorsally over posterior half, the surface feebly concave just

behind clypeus. Preocular laminae feebly converging and weakly convex in outline as seen from above, the distance across them at the level of the antennal insertions about 0.20 mm. Dorsolateral margins of head (dorsal scrobe borders) with a feeble lamellate border on each side, much weaker than the corresponding borders in *ogloblini*. Clypeus broadly triangular, nearly plane, anterior border weakly concave in the middle. Eyes very small, flat, situated on dorsal side of well defined ventral scrobe borders. Antennal scape (L 0.22 mm.) much narrowed at base, slightly bent at basal quarter, gently incrassate from bend to beyond midlength. Funiculus slender, L 0.33 mm.; apical segment approximately twice as long as I-IV taken together, slender, tapered to an acute apex; segment I longer than IV or II plus III, rather thick; II and III very short, transverse, forming a basally narrowed stalk socketted on the much broader I; IV about as broad as long. Head beneath with curving transverse postoral sulcus.

Alitrunk compact; pronotum broadly rounded anteriorly, with very feebly indicated humeral angles, and a fine median carinula continuing back across mesonotum. In profile, dorsal outline of alitrunk forms one gentle even convexity, strongest in pronotal region; metanotal groove straight, faint, not markedly interrupting lateral-view profile. Propodeal teeth small but acute, parallel, not half as long as the distance between centers of bases, elevated, subtended by narrow, concave infradental lamellae which broaden at ventral extremes to form low rounded angles.

Petiole with a small node, which is shorter over its free portion than is the slender peduncle; node tilted posteriad and obliquely depressed from an anterodorsal direction, its appendages reduced to cariniform vestiges. Postpetiole transverse, considerably broader than petiole, but still moderate in size, strongly convex, spongiform masses well developed ventrally and posterolaterally. Gaster broad-oval, dorsal surface only gently convex, with distinct, parallel basal costulae extending $\frac{1}{4}$ or a little more the length of the basal segment.

Remainder of gaster smooth and shining, as are also posterior sides of alitrunk and propodeal declivity. Head and alitrunk densely but rather coarsely punctulate, legs, scapes and petiolar node more finely punctulate, opaque; mandibles and funiculi subopaque. Postpetiolar disc apparently smooth and shining, but in this specimen fouled with foreign matter.

Ground pilosity of head consisting of some rather broad but inconspicuous, short, reclinate cochlear hairs, much fewer and even more inconspicuous on alitrunk. Anterodorsal scape borders each with about 5 short, reclinate cochlear hairs, directed posteriorly (some missing in holotype). Posterior occiput with a pair of short, erect spatulate hairs (the female has a second similar pair on the vertex, which may have been rubbed off the worker). Lateral border of each occipital lobe with a short, crooked subflagellate hair. Humeral and lateral mesonotal pairs flagellate, looped back in this specimen. Anterior border of scape with 4 conspicuous, slender spatulate hairs, nos. 1 and 4 directed apicad, 2 and 3 basad. Nodes with a few fine reclinate hairs; postpetiole and gaster with a few posteromedially slanting weak flagellate hairs, the tips looped back in the type nest series. Underside of head and surfaces of legs with fine, short appressed and decumbent pilosity; a few

fine erect hairs on apex and under surface of gaster. Color slightly sordid yellow.

The holotype (N. A. Weber Collection) came from Pitch Lake, Trinidad, British West Indies, June 22, 1935 (N. A. Weber leg., Cat. No. 206). A paratype worker and a dealate female with the same data as for the holotype are in MCZ and Weber Collection.

FEMALE, dealate: TL 1.7, HL 0.40, ML 0.20, WL 0.42 mm.; CI 86, MI 51. Differs from worker in the usual ways. Petiolar node even more depressed, and wider. Mesonotum evenly and densely punctulate, with carina or rugulae; with a few short, fine erect hairs. Eyes very small for a female *Strumigenys*, only weakly convex.

Additional paratypes are a dealate female from Belém do Pará, Brazil (C. R. Gonçalves leg.) and workers from Agudos, S. Paulo, Brazil (C. Gilbert leg.); Kempf Collection, No. 1376; very similar to holotype, differing slightly in size, proportions and depth of color. *S. perparva* is closest to *ogloblini*, but is much smaller and differs in minor structural characters as well.

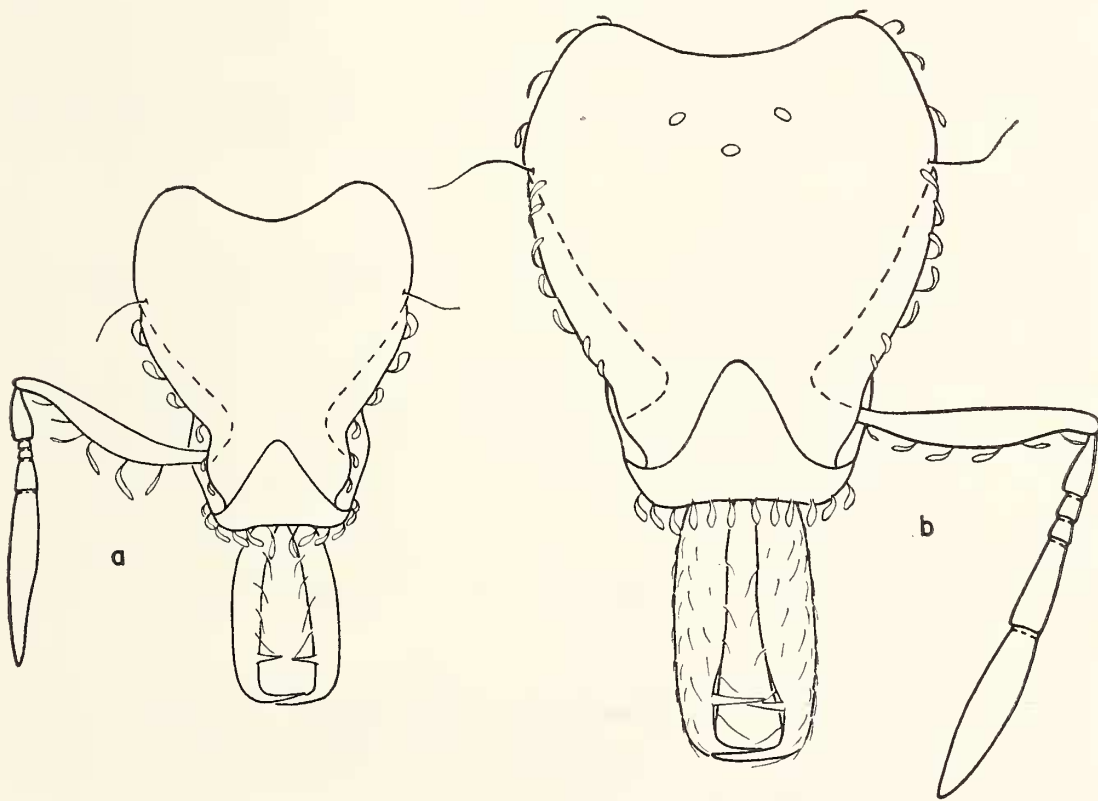


FIG. 1. *Strumigenys* spp., dorsal view of head, showing fringing pilosity only; drawn to same scale. a, *S. perparva* new species, worker from type nest series, Pitch Lake, Trinidad. b, *S. ogloblini* Santschi, female from Tucumán, Argentina. Drawings by Nancy Buffler.

Strumigenys ogloblini Santschi
(Fig. 1b)

Strumigenys (*s. str.*) *ogloblini* Santschi, 1936, Rev. Ent., Rio de Janeiro, 6: 409, figs. 15, 16, worker. Type loc.: Loreto, Misiones, Argentina, "nest in ground." Type in Basel Naturhistorisches Museum, not seen.

WORKER: TL about 2.3–2.5 (estimate), HL 0.55–0.56, HW 0.44–0.45 (CI 80–81), ML 0.28–0.29 (MI 51–52), WL about 0.55 mm. (estimate). Readily distinguished by the strongly convex cephalic dorsum, the broad translucent margins along each dorsal scrobe border, and the mandibular form and dentition. There is a single preapical tooth on each mandible (no other preapical or submedian teeth or denticles) at some distance from the apical fork (see Fig. 1b); two principal teeth of fork subequal in length; a single well developed and acute intercalary denticle between them.

Propodeal lamellae each in the form of a short, acute tooth above, below this concave, then broadly convex over the greater part of the length. Petiole with slender, dorsally bicarinate peduncle and small, anteroposteriorly compressed node, subtriangular and bluntly pointed above as seen from the side, but truncate anteriorly as seen from above. Node with broad posterodorsal spongiform collar extended down the sides as thick posterolateral flaps. Ventral spongy band well developed. Postpetiole transverse-elliptical, convex, its surface obscurely punctulate at the sides, becoming smooth and shining in the middle; surrounded by heavy spongiform borders and hung beneath with voluminous spongy masses. Gaster smooth and shining, with short but distinct basal costulae extending $1/5$ the length of the basal segment.

Ground pilosity of head and alitrunk consisting of short, curved, subreclinate spatulate or cochlear hairs over most surfaces and extending to scape margins (only marginal pilosity shown in Fig. 1b); some of the hairs in the center of the verticociput are longer and more nearly erect, curved anteriorly. Paired long flagelliform hairs—one hair on each lateral occipital border, one on each humerus, and one on each side at the base of the gastric dorsum. One or two pairs of posteriorly curved spatulate hairs on each node. Dorsal surface of gaster with 24–30 or more long, linear-spatulate hairs, curved posteromesad. Legs with short, fine, subreclinate, narrow-cochlear pilosity. Short fine pilosity on gula, underside of gaster and surfaces of mandibles. Color ferruginous.

FEMALE (One alate and one dealate): TL 2.6–2.7, HL 0.57–0.58, HW 0.46–0.48 (CI 81–83), ML 0.29 (MI 50–51), WL 0.61–0.62, forewing L 2.0 mm. Eye rather modest in size, about 0.10 mm. max. diameter. Mesepisterna smooth and shining for the most part.

MALE: I have males of several Argentinian *Strumigenys* and *Smithistruma* species, but have not yet been able to make secure association with the worker-female castes, so the *ogloblini* male cannot be described.

The above descriptions were taken from two workers and several females collected by Dr. N. Kusnezov at Tucumán, Argentina. They agree reasonably well with Santschi's description, although Santschi's figure of the head is evidently too narrow and incorrect in details of pilosity. Santschi's types were badly damaged, and lacked gasters and nodes, but the details of mandible form and dentition leave little doubt concerning the correctness of the present identification. Apparently this species is widely distributed in northern Argentina, and probably will be found also in southern Brazil. The total outstretched length of the workers, and also their alitrunk lengths (WL) are estimated because I neglected to take all the measurements at the time when I had workers available for study.